New strategies for audience involvement and economic sustainability for the cultural heritage sector after the COVID19 Pandemic: insights from Italy

Enrico Bertacchini, orcid.org/0000-0003-4832-5798
Andrea Morelli
Giovanna Segre, orcid.org/0000-0002-5896-3809

Abstract
This chapter addresses how the impact of the COVID19 crisis is obliging museums to rethink their strategies toward new models of audience involvement and economic sustainability. The pandemic has accelerated the convergence between the digital and physical experience of heritage-related services and will give the local audience and proximity tourism more prominence as a source of stability for museum activities.

Two seminal proposals that emerged in the Italian debate during the COVID19 crisis provide insights into how museums and heritage institutions need to adapt their strategies to cope with such structural change. In particular, the two strategies refer to shifting from a transactional to a relationship orientation toward their audience and exploring new network governance models to fully exploit the opportunities provided by the integration between digital and onsite services. We argue that membership schemes to museum networks can reach these complementary objectives and discuss an illustrative application of this proposal for the network of Italian State Museums.

Keywords: Museums, cultural heritage, proximity tourism, subscription models, COVID19

1. Introduction
Among the cultural and creative industries, museums and heritage sites have been one of the most hit sectors by the COVID19 pandemic. According to UNESCO (UNESCO, 2020), 90% of museums worldwide have been temporarily closed for weeks or months during the emergency due to sanitary restriction measures, and 10% have reported being at risk of permanent closure. Similarly, the closure of borders and the block of international and within-country mobility has led to a sharp decrease in cultural tourism, with significant income losses (up to 75-80%) for museums and heritage sites in tourist areas (NEMO, 2020). While some institutions benefit from public subsidies, the economic consequences of the pandemic have been severe as most of the cultural heritage sector relies greatly on financial contributions from visitors and donors.

The cultural heritage sector has been commonly recognized as one of the Cultural and Creative industries characterized by both a slow change in semiotic code and material base
(Jones et al., 2015). Still, the COVID19 has potentially unveiled the necessity for a radical change and restructuring of strategies by museums and heritage institutions. The emergency, in some respects, has accelerated a long-lasting trend toward innovative practices, especially related to the digital domain, but that suffered from cultural and organizational barriers in their adoption (Bakhshi and Throsby, 2012). In other cases, the pandemic is deeply questioning the development model of museums and heritage institutions, especially regarding audience target and revenue sources.

In this chapter, we address how the impact of the COVID19 crisis is obliging museums to rethink their strategies toward new models of audience involvement and economic sustainability. Crucially, amid supply and demand shocks brought by the pandemic, we identify two main dimensions of structural change: the convergence between the digital and physical experience and the increased importance of local audience and proximity tourism as a source of stability for museum activities. To cope with such a structural change, we argue that museums need to shift from a transactional to a relationship orientation toward their audience, where the emphasis is no longer on attracting visitors for single experiences under traditional pricing models but on proactively developing and maintaining loyal audiences through novel membership schemes. At the same time, to fully grasp the opportunities of providing digital and physical access to their collections, museums should rely on new network governance models.

We use the Italian context as a seminal case study for illustrating these arguments. Drawing from the current debate on the economic sustainability of the Italian museum system during and after the COVID19 crisis, we discuss the application of a universal membership scheme for State museums as a novel tool of audience involvement and test its economic viability as an alternative financing mechanism.

Most of the debate on the effects of the pandemic in the cultural heritage sector has concentrated on short-term recovery interventions or digital activities as the main focus of the response to the crisis. Our contribution provides instead a prescriptive and policy-oriented discussion on the possible strategies and solutions supporting the sector and its economic viability in a longer-term and post-pandemic scenario.

2. Structural change in museum and heritage sector after COVID19

As highlighted in the organization studies and innovation literature (Drazin et al. 2004), structural change results from complex dynamics involving the interaction of technological, social, and economic patterns at the macro level, but reflect organizational change at the micro level. We argue that the pandemic has brought to light two potential dimensions of structural change affecting the cultural heritage and museum sector.

A first dimension is a more profound convergence between the digital and physical experience provided by heritage-related services. As stewards of cultural heritage, museums and heritage institutions have increasingly seen in the last decades at the core of their mission the transmission and communication of knowledge related to their heritage (Anderson, 2004). Cultural heritage organizations have traditionally accomplished this
mission by providing physical access to their collections and artifacts, coupled with onsite learning and educational activities. Still, the digital revolution has led to new opportunities to access and transmit such valuable knowledge (Bertacchini and Morando, 2012). Today, there is a clear understanding of such opportunities. In particular, online access to digital collections may be seen as an innovation in audience reach. In many cases, it has enhanced accessibility to authoritative and trusted content and related information by complementing the user's physical visit (Marty, 2008, Navarrete and Borowiecki, 2016). Moreover, Navarrete (2013) underlines how digitization has often represented a solution to exhibiting the museums' collection, as physically displayed objects are just a minor share of the entire collection.

In this perspective, it is not unexpected that during the COVID19 outbreak, with the closure of physical access to their collections, museums and cultural institutions have signaled the need to invest in digital infrastructure striving for online visibility and maintaining ties with their audiences (NEMO, 2020, Samaroudi et al., 2020).

Yet, a relatively overlooked aspect is how the effect of this crisis can lead to better integration of the digital and physical experience within museums and heritage institutions. In many cases, the necessity of visitors' tracing made compulsory the online reservation of the onsite visit, with the possibility for the institution to know beforehand the characteristics of its audience and establish a digital interaction with prospective visitors. If properly managed, such a small change can radically alter physical and digital heritage consumption patterns enhancing the experience (Ballina et al., 2019). Having an advance-tracking system for their future visitors, museums can provide a broader and long-lasting experience of their collections, leveraging on versioning of their physical and digital output (i.e., free access vs. premium content). For example, the visitor begins the experience online through the contents and digital services related to the collection. She can deepen the visit to the museum, which continues online with further post-visit insights or proposals for new experiences. Moreover, integrating the digital and physical experience could enable better profiling of visitors and their habits, leading to more personalized cultural heritage experiences (Nuccio and Bertacchini, 2021).

These conditions undoubtedly represent opportunities in the heritage sector as they can favor an acceleration of data-analytics innovation processes that would have taken several years. At the same time, it remains an open question whether the very fragmented digital strategies of heritage institutions, coupled with lack of resources or cultural barriers toward new technological innovation by some organizations, might enable all the museums to exploit the new data-driven potential of the convergence.

The second dimension of structural change refers to proximity tourism and local audiences' increased importance as a source of stability for museum activities. Amid unprecedented global travel restrictions and the very high uncertainty on the end of the pandemic worldwide, the tourism industry and particularly long-haul tourism have been deeply affected by the pandemic. The COVID19 is not only posing a severe challenge to the sustainability of regions with high tourist specialization, but a growing number of observers (Farzanegan et al., 2020; Gössling et al., 2020; Prideaux et al., 2020) suggest that, in analogy with the ongoing climate crisis, it questions the volume-growth tourism model advocated till recently by several organizations and stakeholders in the tourism sector.
As cultural tourism has represented in the last two decades a significant driver of the demand for museums and heritage institutions (Richards, 2018), the pandemic has equally unveiled the fragility of the sector in leveraging on tourism models driven by long-haul mobility and the attractiveness of single masterpieces or iconic museums facilities.

In a post-pandemic scenario, addressing proximity tourism and catering to local audience demand could offer an alternative sustainable strategy to stabilize museum activities in the future volatile context (Ramagosa, 2020). Nevertheless, proximity tourism has been a neglected field in tourism research and has only recently gained attention in the scholarship debate (Jeuring & Diaz-Soria, 2017; Bertacchini et al., 2019). Similarly, while repeat visits have been one of the main targets of the museum and cultural attractions managers, investing in the attraction of repeat visitors as a promotion strategy has often been overshadowed by the opportunities of attracting ever-increasing flows of first-time visitors. While literature addressing loyalty in tourism behavior has often considered satisfaction as the main element for inducing repeat visitation, research on repeat visits to cultural attractions indicate more complex motivational and behavioral factors at play, where the choice to revisit is more a process of enculturation that is not necessarily based on the novelty of the cultural supply (Brida et al. 2014). This implies that to cater to the demand of local audience and visitors from proximate areas, museums and heritage institutions must leverage on the cultural value of the available collections and objects, but through designing activities and experiences seen by the repeat visitors as novel chances to enhance their cultural capital (Black, 2016). This implies a deep change in museum programming, from expensive blockbuster exhibitions to modular and replicable activities linked to single aspects, perspectives or items of the museum collection.

Moreover, while the local audience might constitute a more homogeneous set, at least from the point of view of the motivations, it might express specific needs or diversified preferences. Timing of the repeat visit, jointly with the propensity of loyal visitors to attend other cultural events in the local area, suggests the need for an adequate promotion of events at different times of the day, raising the attention toward the museum as a place of 'cultural production', and consequently stimulate the repeat visit of a place where cultural capital can be enhanced (Black, 2013). Similarly, a shift toward the local audience and proximity visitors suggests that museum activities should be tailored to target the needs of entire households rather than the visitor profile characterizing long-haul tourism (Lang et al., 2013)

3. Italian cultural heritage organizations and COVID19

The Italian cultural heritage is often considered one of the largest and most diversified globally, characterized by a vast and heterogeneous set of museums and heritage organizations, which differ from the type of collection, geographical location, institutional features and number of visitors.

According to the Italian museum census, about 5,000 museums and similar institutions are active in Italy, made up of 3,882 museums, galleries or collections (80.5%), 630
monuments and monumental buildings (12.8%), 327 archaeological and historical parks (6.7%). One peculiar feature of the Italian cultural heritage system is its high territorial dispersion. Museums and heritage institutions are present in all regions, with a relatively higher density (related to resident population or surface size) in the northern–central regions and in both large metropolitan areas and small cities (one in three municipalities has at least a museum or heritage site). The spatial distribution is rooted in the historical political fragmentation of the country. However, today it allows, unlike other European countries, to have a more geographically articulated offer of cultural heritage sites and museums, even if more challenging to manage due to the high fragmentation.

From an institutional viewpoint, the ownership structure of the heritage institutions is governmental primarily (63.4%), at the level of State, Regions, local public administrations (provinces and municipalities), public schools and universities. However, there is a significant heterogeneity regarding the size and characteristics of heritage institutions depending on ownership and control by public sector authorities.

While most public museums and cultural institutions are owned by local government and municipal authorities, only 448 are owned and managed at the state level. This group which constitute less than 10% of the total, alone attracts about 40% of visitors as it includes some of the most internationally known museums, monuments and archaeological parks that attract a large flow of visitors, like the Galleria Degli Uffizi, Pantheon, the Flavian Amphitheatre (Colosseum), the Archaeological Area of Pompeii and the Museum and Park of Capodimonte. At the same time, besides the main attractors, is a large number of less visited state-owned museums and heritage institutions, whose management and conservation are under central government control due to the national significance of their cultural heritage.

Overall, the cultural heritage sector has been experiencing a positive trend in visits in recent years. From 2006 to 2018, visits to Italian cultural heritage increased by almost a third (32.2%), growing on average at a rate of over 2.5 million visitors per year. In particular, the number of admissions to state-owned museums, monuments and archaeological areas almost doubled, from 34.6 million to 54.1 million, and the number of visitors to non-state facilities also grew, even if more slowly, from 62.7 million in 2006 to 74.5 million. In 2018, a record number of 128.6 million admissions were therefore reached. A growth mainly driven by the significant share of foreign tourists who visited the cultural institutions, 46% of the total public in 2018.

Compared to the buoyant growing demand for onsite visits, digitization and the provision of digital services by Italian museums and heritage institutions still show wide margins for improvement. According to data from the 2018 museum census, only 10% of state-owned museums and similar institutions have digitally catalogued their heritage, and only 37.4% of these have completed the digitization process. The use of interactive technologies and digital tools to enrich the visiting experience and the visitors’ engagement is still limited, with only one institution out of ten (9.9%) offering the possibility to visit their collections or heritage site virtually. Similar limitations emerge when considering standard digital communication: only about half of the museums report having a website and a social media account (51.1% and 53.4%, respectively, and only 14% provide online ticketing services.
As in other European countries, in recent decades, the cultural heritage sector, characterized by a relevant component of public ownership, has been subject to reforms aimed at greater autonomy and administrative decentralization (Bertacchini et al., 2018). In particular, a major reform by the Italian Ministry of Cultural Heritage in 2014 has provided some state museums with a more considerable degree of managerial and technical-scientific autonomy, but also introducing measures that may favour the implementation of network governance models for all cultural heritage institutions at the national and regional level (Marzano and Castellini, 2018). In particular, the reform granted to 32 state museums and heritage sites financial and managerial autonomy and introduced 17 regional hubs to coordinate clusters of the non-autonomous state museums and drive the development of networks among social and institutional bodies in the area (Baia Curioni, 2018).

Besides administrative decentralization and network governance, another key objective of recent reforms by the Italian Ministry of Cultural Heritage has been to enhance the digital infrastructure coordinate activities within the museum and heritage sector and give centrality to digital technologies in further stimulating the transformation of museums for audience involvement and relationship (Agostino and Arnaboldi, 2020). This objective is currently pursued by implementing a national museum system (Sistema Museale Nazionale), an online platform aimed at connecting the cultural heritage of nearly 5000 museums and institutions in Italy, as well as at presenting and promoting them and their collections through a nation-wide network.

As clear from the arguments above, the Covid-19 outbreak had impacted the Italian museum and heritage sector when the effects of the reforms and transformations in recent years began to be evident. Like in many other countries, museums have undertaken several digital activities, focusing on online activity and social media engagement to maintain or develop the relationship with their audience. For example, by analyzing data of about one hundred state museums, Agostino et al. (2020a) illustrate how there has been a sharp rise in online cultural material and initiatives through social media during the first lockdown period in Italy.

The apparent success of such initiatives has stimulated a debate on the potential of the digital offer and how future directions of digitally enabled approaches can be used to find new strategies for the sustainability of Italian cultural heritage institutions in post-pandemic scenarios.

A first proposal that has received particular attention in the media, being supported by the Italian Ministry of Cultural Heritage, has been that of envisioning the creation of a "Netflix" of Italian culture, a platform for the distribution of digital content produced and offered by cultural institutions (Agostino et al. 2020b).[^1]

With less ado, one of the most interesting contributions in the debate has come from James Bradburne, Director of the Italian state museum Pinacoteca di Brera[^2], proposing a manifesto to accelerate the change induced by COVID19 in the sector by revolutionizing museums' strategies for audience relationship and engagement. The heart of the proposal is to create an economic model that replaces the purchase of a single visit with the purchase of a subscription for the contents and services that museums offer, both virtual and onsite.
This vision has been already implemented in experimental form by launching BreraPlus+, a subscription-based online platform that enriches the experience with digital multimedia content.

4. Membership schemes of museum networks: a new subscription model for accessing the physical and digital heritage

The two proposals that emerged in the Italian debate and reviewed in this chapter indicate the need to find new strategies for audience involvement and the economic sustainability of heritage institutions. Although still in an embryonic state, the proposals illustrate different approaches, with advantages and limitations, in responding to the trajectories of structural change in the cultural heritage sector.

In the first case, the "Netflix" model, while representing a mere digital solution to the reduction of physical access, emphasizes the opportunity to exploit platform economies of scale from a network of cultural institutions to convey digital cultural content in a scenario where users of creative products and services increasingly use streaming and on-demand content platforms. However, as it has already emerged in the Italian debate, in a very competitive environment such as that of online digital content provision, the creation of a brand-new dedicated platform casts some doubts on the return on investment and the opportunity to monetize digital content related to Italian arts and cultural heritage. The BreraPlus+ model, in turn, emphasizes the integration between the physical and digital experience of the museum, with a potential attractiveness for repeat visits of local audiences. However, if replicated by many other institutions in an uncoordinated way, it leads to a risk of over-fragmentation, with perspective visitors being obliged to subscribe to several programs proposed by different museums. Moreover, platform economies of scale and network externalities would not be fully exploited.

Notwithstanding the limitations of the two approaches taken individually, we argue that it is possible to combine their positive aspects by identifying strategies that pursue:

- a shift from a transaction to a relationship orientation in the museum sector
- platform economies of scale through innovation in the role and functions of museum networks

As highlighted in the scholarship debate, the relationship orientation means "proactively creating, developing and maintaining committed, interactive and profitable exchanges with customers over time" (Garrido and Camarero, 2014). In contrast to the transaction orientation, which centers on increasing revenues at a single purchasing occasion, the relationship orientation adopts a longer-term perspective in the audience involvement that can innovate and extend traditional friends' and membership schemes (Slater, 2004). These schemes are mainly conceived as a club solution for supporting museums by creating a community of actively engaged members that usually represent a relatively small group compared to the whole audience of a heritage institution (Frey and Steiner, 2012). A novel relationship orientation addressing a broader audience base could be better suited to
provide stability in museums' activities in a context where heritage institutions have to cope with the volatility of long-haul tourism demand while relying on less mobile local cultural consumers. At the same time, as the Pinacoteca di Brera initiative suggests, a relationship orientation would not leverage so much on the pro-social behaviour of a minority, but rather on the interest of the large audience to have continuous access to the museum's activities both online and onsite.

Besides a shift toward a more substantial relationship orientation, innovation in the role and functions of museum networks could enhance the exploitation of platform and network externalities deriving from the integration of digital and physical access by visitors to collections and sites. In their primary forms, museum networks may be described as an "ordered group of heritage institutions that, by inter-relating with one another, help accomplish a series of established objectives". Networks have often been established to improve museums' competitive and profitability capacity by exploiting economies of scale in organization input and visitor services or enhancing their cultural potential by building a stronger collective image through collaboration.

One particular form of museum networks addressing audience demand arises from destination cards and museum passes, where visitors, both tourists or residents, through the purchase of a single pass, have access to the cultural offer of all the institutions included in the network. Notable cases of schemes applying a bundling pricing strategy coupled with unlimited access are the Dutch Museum pass or the Carta Musei Piemonte (Werff et al., 2014; Bertacchini et al., 2019). These initiatives already have the purpose of establishing a stable relationship with local audiences and favoring cultural proximity tourism. However, they have mainly focused on physical access to the museum network without fully grasping the opportunity of a shared digital platform for subscribers where museums can become digital content producers and providers. To cope with the current challenges and opportunities posed by the COVID19 crisis, we suggest that membership schemes for museum networks can represent a promising option that helps to realize museums' relationship orientation and enhances the integration between digital and physical access to cultural heritage.

5. Exploring the economic viability of a universal membership scheme for Italian state museums

The Italian context allows us to explore this policy proposal by considering the implementation of a universal membership scheme for state museums and cultural heritage institutions.

State museums, monuments and archaeological parks represent the most organized network of heritage institutions in Italy. Despite the recent reforms toward greater autonomy of some of the most important museums and archaeological areas, this network has an established coordination system and enough organizational capacities to maintain a shared strategic vision. Moreover, the network is also at the core of the new strategy for creating a national museum system, of which one of the most important cornerstones is a shared digital platform.
Similarly to museums passes, a universal membership scheme could be designed to provide one-year access to online content and onsite visits for both Italian and foreign visitors. While individual entrance fees could still be charged, we envision a scheme that gives free and unlimited access to all museums of the network for 12 months, bundled with services provided through the shared digital platform where subscribers can enjoy extra digital content and virtual experiences produced by the museums about Italian cultural heritage. It can be purchased freely at any time in anticipation of future visits to museums or for access to digital content. The information about the pass-holders, collected both at the registration and through the tracking of the use of the pass, can be helpful to profile their experience and enhance opportunities of relationship with the museums of the network. In a post-COVID19 scenario, reservation of onsite visits could become the standard even with the membership scheme. However, as previously discussed, this new policy would enhance the integration between the digital and physical experiences of a diversified cultural offer available through the pass. As with the Pinacoteca of Brera pioneering initiative, but extended to more than 400 museums and heritage sites, this move would represent a radical shift in audience relationship and engagement by favoring repeated access to the collections and the content provided by the institutions as producers of digital cultural experiences.

Arguably, the universal membership scheme enables the state museums to take advantage of network and platform externalities online and onsite. Firstly, the size of the network ensures a critical mass of digital content on Italian cultural heritage conveyed in a single platform that can be attractive for both national and international audiences. Secondly, the reduced competition between museums to attract visitors can potentially trigger cooperative solutions. For example, the circulation of artworks and objects within the system (especially from major museums to minor ones) can enable visitors to enjoy them at different locations or enhance curatorial possibilities in exhibiting collections. In addition, another potential economic advantage of introducing a universal membership scheme would be reducing transaction costs in the management of admissions for museums. In contrast, reduction of transaction costs for pass-holders is less certain as it is very likely that onsite visits should be still reserved in advance when the pandemic will be over or under control.

One of the main challenges for implementing such a novel scheme is to assess its economic viability in terms of potential revenues and consumer demand. For instance, financial resources collected from the membership scheme should compensate for the foregone revenues of standard entrance fees and possibly grant new funds to invest in the digital infrastructure of the museum network and the production of new digital services and content.

In illustrative terms, it is possible to test the feasibility of this proposal using the data and statistics available on Italian museums and their visitors. Table 1 shows key economic facts of Italian State museums and heritage institutions relevant for the analysis.

Table 1: Characteristics and economic facts of Italian state-owned museums and heritage institutions – 2018

<table>
<thead>
<tr>
<th></th>
<th>Values</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Museums, monuments and archaeological sites</td>
<td>448</td>
<td></td>
</tr>
</tbody>
</table>
### Table 1: Visitor Data and Revenues

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (Visits)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of visits</td>
<td>55,313,772</td>
<td></td>
</tr>
<tr>
<td>Free visits</td>
<td>30,329,887</td>
<td>54.8%</td>
</tr>
<tr>
<td>Fee-paying visits</td>
<td>24,983,885</td>
<td>45.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Count (Visits)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of fee-paying visits</td>
<td>24,983,885</td>
<td></td>
</tr>
<tr>
<td>Italians*</td>
<td>11,843,436</td>
<td>47.4%</td>
</tr>
<tr>
<td>Foreigners*</td>
<td>13,140,448</td>
<td>52.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary</th>
<th>Value</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total gross revenues</td>
<td>229,631,099 €</td>
<td></td>
</tr>
<tr>
<td>Total net revenues</td>
<td>188,524,664 €</td>
<td></td>
</tr>
<tr>
<td>Total net revenues from Italian visitors*</td>
<td>89,360,691 €</td>
<td>47.4%</td>
</tr>
<tr>
<td>Total net revenues from foreign visitors*</td>
<td>99,163,973 €</td>
<td>52.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average gross ticket price</td>
<td>9.20 €</td>
</tr>
<tr>
<td>Average net ticket price</td>
<td>7.50 €</td>
</tr>
</tbody>
</table>

Source the Statistical Office of the Ministry of Cultural Heritage; a: estimates on Italian and foreign visitors based on information reported on the Census of Italian Museums and Heritage Institutions, 2018 (ISTAT)

For 2018, the last year with available data before the COVID19 outbreak, the state museum system had around 30 million free admissions and 24 million paid admissions. Free admissions are mainly made up by visitors under 18, visits to structures that do not charge an entrance fee (34%) or from those to all state museums occurring on the first Sundays of each month following the free admission policy in force since 2014 (Cellini and Cuccia, 2018). The paid admissions generated gross revenues of 229 million euros and, excluding ticketing services concessions, 188 million euros. The net average ticket price is 7.55 euros, a relatively low value that is potentially due to discounted rates applied to visitors up to 25 years of age.

The Census of Italian museums, archaeological sites and monuments reports each institution's estimated share of foreign visitors. With this information, it is possible to derive the share of paid admissions and revenues generated by Italian and foreign visitors. As shown in Table 1, the share of paid admission by foreign visitors is about 50%, consistent with the fact that there are some of the most iconic and attractive institutions for foreign visitors among the state museums and archaeological areas.

Since a universal membership scheme would apply to single individuals, one methodological challenge posed by the available data is to infer how many paid admissions are repeated visits to any museum or heritage institution belonging to the network. For foreign visitors, it is only possible to make some speculative hypothesis on how many state museums they visit during their trip to Italy. Conversely, for Italian visitors, cultural
participation data on the yearly frequency of attendance to museums, archaeological areas and monuments could provide a more grounded indication.

Figure 1 presents the number of visitors per frequency of attendance and the number of paid admissions of each group to the state museum system, assuming that the same distribution of visits per individual inferred through cultural participation survey for the Italian population aged 18 and over also holds for the subpopulation of Italian visitors to State museums. As expected, the distribution of visitors and visits per frequency of attendance is skewed. However, while visitors who have made up to 3 visits correspond to about 50% of the total of Italian visitors, the share of visits by this group is only 20% of the total admissions, accounting for the relative contribution of more frequent visitors.

From this elaboration, it can be easily estimated that a total of 2,272,608 individuals have made at least once a paid admission to Italian state museums. Dividing the revenues from admission fees attributed to Italian visitors by this figure leads to an amount of 39€. This amount represents the breakeven price of the membership scheme that should be charged to obtain the same revenues collected through paid admissions of Italian visitors.

This calculus is based on some rigid assumptions and can be criticized for oversimplifying a complex reality that requires more data collection to be understood. Further, it can be objected that it does not consider relevant aspects of museum visitors' behaviour. Nevertheless, it represents a starting point for a more reasoned discussion on the economic opportunities of implementing a universal membership scheme. The price obtained is first in line with, if not lower than, existing annual museum passes targeting residents. If the same price of the annual membership scheme would be applied to foreign visitors, this would barely correspond to the sum of the entrance tickets to some of the museums, which often represent a must on foreigners' trips to Italy. Moreover, according to the estimated revenues generated through entrance fees by foreign visitors, a price of 39 euros for a
universal membership scheme implies that at least 2.5 million foreigners should purchase the pass, which corresponds to the 12% of foreign cultural tourists visiting Italy.\(^6\)

The economic feasibility of the pricing proposal is strongly dependent on the number of people potentially interested in subscribing to the universal membership scheme. Starting from this breakeven scenario, there are several factors related to individual preferences that can negatively or positively influence the demand for the scheme, both for the Italian and foreign audience:

- **Preferences of occasional visitors**: people who expect to visit state museums only a few times a year and do not derive enough utility from the bundled digital goods provided through the online platform may find the pass not worth and would still prefer to purchase single admissions. Alternatively, those that currently make few onsite visits may consider it worth paying a premium price for exclusive access to the online cultural content. Considering the proposed price of the membership schemes, this argument applies to subjects with up to 4 visits, making their preferences and choice relevant for determining the size of the potential base of pass-holders.

- **Preferences for flat-rate pricing**: visitors might prefer a flat rate even if it is higher than the pay-per-visit price. Behavioural research has identified several explanations for this bias, such as mental accounting or risk aversion (Lambrecht and Skiera, 2006). As a result, risk-averse individuals may choose to purchase the museum membership scheme for the option value it provides to visit any number of times museums and heritage sites. Further, individuals who used to visit state museums only during free-admittance special days may be willing to pay the pass for more flexibility in planning their visits. Overall, these effects would increase the base of potential pass-holders.

- **Preferences for variety and bundled products**: Without a membership scheme, the observed demand is that of visits to museums for which individuals had a reservation price higher than the admission fee. However, the same individuals could express lower but positive reservation prices for visiting other museums in the network. As a mixed bundling strategy combining access to several museums and information goods content at a lower price than if the visitor were to purchase each ticket individually (Bakos, Y., & Brynjolfsson, 1999), the membership scheme could partly address such unsatiated demand and be attractive for individuals who have preferences for greater variety in cultural heritage experiences.

- **Preferences for voluntary contributions**: The universal membership scheme could trigger individual support to cultural heritage regardless of the utility arising from visits and online content. Subscription to the annual pass could be then considered not merely for the advantage of accessing collections and sites, but for some people as a form of crowd-patronage (Sword, 2017). Paying for the membership scheme would then be a form of voluntary price discrimination for those willing to support the network of state museums (Hansmann, 1981).
The economic sustainability of the universal membership scheme depends on the above-listed factors concerning individual preferences, which may influence its adoption. Although a museum pass is already theoretically applicable today, we believe that the real success of this initiative depends on whether it will be able to represent an alternative funding tool for museums in a post-COVID19 scenario.

Finally, there are other relevant issues to consider regarding the effective implementation of this proposal. These aspects do not concern the potential demand of pass purchasers, but economic factors affecting the provision of the service within the new membership scheme.

- **Management costs**: ticketing services currently amount to 40 million euros, about 20% of revenues from paid admissions. Implementing the new universal membership scheme while maintaining the option of single entrance fee available should reduce the management costs of ticketing services. If this were not the case, adopting a universal membership scheme would risk being a lower option than the current ticketing service system.

- **Equity concerns**: Italian state museums are not evenly distributed over the territory but are more concentrated in some regions (i.e. Tuscany, Lazio or Campagna). While geographic distribution should not pose a problem for foreign visitors, it could create inequalities in access opportunities for locals. Residents in areas far from state museums face higher costs to use the pass, which can only be partly lessened by the circulation of artworks and objects exhibited at different museums in the network.

- **Allocation rules**: the choice of the allocation rule of the joint proceeds from the pass sales can lead to distributional concerns, and it might become particularly relevant if the pass program is extended to other museums and heritage institutions, because it can generate divergent incentives to participate in the universal membership scheme. According to Ginsburgh and Zhang (2001), a sharing rule based on the relative contribution of each museum to the overall income generated by the joint pass program is superior to other sharing rules (i.e. those proportional to losses from forgone admission fees or proportional only to the number of visits) as this rule rewards attractiveness but also allocate income to free entry museums.

**CONCLUSION**

In this chapter, we have analyzed how the pandemic has impacted the heritage sector, leading to a structural change that obliges museums and heritage institutions to pursue new strategies for audience involvement and economic sustainability.

Among the major transformations, we claim COVID19 has accelerated the convergence between the digital and physical experience of heritage-related services and will give the local audience and proximity tourism more prominence as a source of stability for museum activities.

Two seminal proposals that emerged in the Italian debate during the COVID19 crisis provide insights as to how museums and heritage institutions, to cope with such structural change, need to shift from a transactional to a relationship orientation toward their audience and explore new network governance models to fully exploit the opportunities provided by the integration between digital and onsite services. Crucially, we argue that membership schemes to museum networks have the potential to reach these complementary objectives.
The illustrative application of a universal membership scheme for Italian State museums as a novel tool of audience involvement suggests that this policy proposal might be, in principle, viable, representing a starting point for a more reasoned discussion on the economic opportunities of implementing innovative subscription models in the heritage sector.

While the impacts of COVID19 on the heritage sector can be reasonably generalized, our contribution offers a policy perspective and normative arguments that fit the Italian context, but do not exhaust a discussion on the alternative strategies that museums and heritage institutions can pursue for audience involvement and economic sustainability in these new times. For example, we focused on the pricing of a membership scheme applied to museum networks. However, dynamic pricing adopted by single institutions to respond to temporal demand fluctuations can represent another potential option of financial sustainability under the newly volatile conditions (Seaman, 2008). At the same time, it is difficult to assess to what extent the advantages of implementing novel subscription models for museum networks could be sensitive to scenarios where pre-pandemic conditions and behaviors are restored.

REFERENCES


---

1 After the initial proposal, the project has developed with the start-up of a new company called ITsART. In June 2021 the platform has been officially launched at www.itsart.tv
We use revenues net of ticketing service concessions. Using gross revenues, the price of the membership scheme is 42 euros.

The Netherlands Museum Pass charges a full rate at 64€. The newly introduced annual pass by the Galleria degli Uffizi is priced at 50€, including also temporary exhibitions.

For example, the entrance fee to Colosseum and Palatino is 16€, that to Pompei Archeological park is 14.5, while for Galleria degli Uffizi is 20€.

Estimate based on Bank of Italy statistics on international tourism flows. In 2018, 40.2 million foreigners visited Italy for holiday and 19.4 million motivated their holiday for visiting cities of art or other cultural reasons.